



Piper Aircraft, Inc.
2926 Piper Drive
Vero Beach, Florida, U.S.A. 32960

SERVICE NO. 251D BULLETIN

**PIPER CONSIDERS
COMPLIANCE MANDATORY**

Date: February 24, 2009

(S)(M)

Service Bulletin 251D supersedes Service Bulletin 251C. Service Bulletin 251D adds a recurring inspection requirement for aircraft with fuel tanks that have been previously treated with Randolph Products Company 802 Sloshing Sealer (Piper P/N 757-572).

SUBJECT:

MAIN FUEL TANK INSPECTION

MODELS AFFECTED:

PA-28-140 Cherokee

PA-28-150 Cherokee
PA-28-160 Cherokee
PA-28-180 Cherokee

PA-28-201T Turbo Dakota
PA-28-235 Cherokee

PA-28R-180 Arrow

PA-28R-200 Arrow/Arrow II

PA-28R-201 Arrow III

PA-28R-201T Turbo Arrow III

PA-28RT-201 Arrow IV

PA-28RT-201T Turbo Arrow IV

PA-32-260 Cherokee Six

PA-32-300 Cherokee Six

PA-32-301 Saratoga

PA-32-301T Turbo Saratoga
PA-32R-300 Lance
PA-32RT-300 Lance II
PA-32RT-300T Turbo Lance II
PA-34-200 Seneca

SERIAL NUMBERS AFFECTED:

28-20001 through 28-26946; 28-7125001 through 28-7725290
28-03; 28-1 through 28-4377 and 28-1760A
28-03; 28-1 through 28-4377 and 28-1760A
28-671 through 28-5859 and 28-7105001 through 28-7205318
28-7921001 through 28-7921095
28-10001 through 28-11378; 28-7110001 through 28-7210023; 28-E11; 28-7310001 through 28-7710089
28R-30002 through 28R-31270 and 28R-7130001 through 28R-7130013
28R-35001 through 28R-35820 and 28R-7135001 through 28R-7135229; 28R-7235001 through 28R-7635545
28R-7737002 through 28R-7837317; 2837001 through 2837061
28R-7703001 through 28R-7803374; 2803001 through 2803012
28R-7918001 through 28R-7918267; 28R-8018001 through 28R-8218026
28R-7931001 through 28R-7931005; 2831001 through 2831013
32-03; 32-04; 32-1 through 32-1297 and 32-7100001 through 32-7800008
32-15; 32-21; 32-40000 through 32-40974 and 32-7140001 through 32-7940290
32-8006002 through 32-8606023 and 3206001 through 3206019
32-8024001 through 32-8424002
32R-7680001 through 32R-7880068
32R-7885002 through 32R-7985106
32R-7787001, 32R-7887002 through 32R-7987126
34-E4; 34-7250001 through 34-7450220

(OVER)

ATA: 2810

COMPLIANCE TIME:

PART I – IDENTIFICATION OF FUEL TANKS THAT HAVE BEEN REPAIRED WITH SLOSHING SEALER:

To occur one time only, at the next regularly scheduled maintenance event, but prior to the next one hundred (100) hours time in service.

PART II – RECURRING INSPECTION OF FUEL TANKS THAT HAVE BEEN REPAIRED WITH SLOSHING SEALER:

To occur periodically, at a maintenance interval frequency not to exceed one hundred (100) hours time in service. Applicable only for fuel tanks that have been repaired with sloshing sealer, as described in **Part I**.

PART III – REPLACEMENT OF FUEL TANKS THAT HAVE BEEN REPAIRED WITH SLOSHING TANK SEALER:

Whenever a leak develops in a fuel tank, or whenever cured sloshing sealer is observed to be separating from the inner walls of the fuel tank. Applicable only for fuel tanks that have been repaired with sloshing sealer, as described in **Part I**.

PURPOSE:

The use of Randolph Products Company 802 Sloshing Sealer (Piper P/N 757-572) was authorized at one time to repair aluminum wing tanks that develop fuel leaks in service. It has been discovered that over time, the cured sealer can separate and detach from the inner walls of the tank and become an obstruction in fuel lines and fuel filters, resulting in a loss of engine power. As a result of this discovery, Sloshing Sealer 802 (Piper P/N 757-572) is no longer authorized for repairing Piper fuel tanks. Do not use Randolph Products Company 802 Sloshing Sealer in any Piper aircraft fuel tanks.

This service bulletin provides instructions for identifying wing tanks that have been treated with sloshing sealer. For fuel tanks that have been treated with sloshing sealer, this service bulletin also provides a recurring inspection schedule, as well as inspection criteria that would mandate the replacement of wing tanks.

NOTE: Leaking wing tanks that have not been previously treated with sloshing sealer may be repaired with Products Research Corp PR-1422A2 sealant, as described in the maintenance manual.

INSTRUCTIONS:

PART I – IDENTIFICATION OF FUEL TANKS THAT HAVE BEEN REPAIRED WITH SLOSHING SEALER:

1. Review logbooks, maintenance records and perform a visual examination of all wing-mounted tanks to determine whether sloshing sealer has ever been used, in accordance with maintenance manual procedures.
 - Untreated tanks will have a bare aluminum color.
 - Fuel tanks that have been treated with sloshing sealer will be lined with a thin yellow coating, ranging in color from light amber to caramel.

INSTRUCTIONS: (continued)

2. Make a logbook entry indicating compliance with **Part I** of this Service Bulletin, including a statement identifying which, if any, wing tanks have been treated with sloshing sealer.
 - If sloshing sealer has never been used on any wing tanks, no further action is required.
 - If sloshing sealer has been used on any wing tank, a recurring inspection is required. Proceed to **Part II**.

PART II - RECURRING INSPECTION OF FUEL TANKS THAT HAVE BEEN REPAIRED WITH SLOSHING SEALER:

It is recommended that fuel tanks that have been previously treated with Sloshing Sealer 802 (Piper P/N 757-572) be replaced. If the fuel tank must remain in service, inspect every one hundred (100) hours time in service as follows:

1. Drain fuel in accordance with maintenance manual instructions.
2. Gain visual access of the inside of the tank through the filler neck. Using a mirror and inspection light, examine the entire interior of the tank for any evidence of separation of the cured sealer from any inner surface of the tank. Small scrapes in the film adjacent to the filler neck may be disregarded, provided that there is no indication of peeling.
3. Examine the exterior of the tank for any signs of a fuel leak. The first indication of a leak is often a stain in the areas of fuel sender gaskets, fuel and vent line penetrations, rivets, and seams. If in doubt, perform a fuel tank leak inspection in accordance with maintenance manual instructions.
4. Make a logbook entry indicating compliance with **Part II** of this Service Bulletin, including a statement of the condition of all wing tanks.
 - If the cured sloshing sealer is adhered completely to all inner surfaces of the tank, and there is no evidence of a fuel leak, no further action is required at this time. Repeat **Part II** of this service bulletin at the next one hundred (100) hours time in service.
 - If the cured sloshing sealer is found to be separating from any part of the fuel tank's inner surface, or if a leak is discovered in a wing tank that has been previously treated with sloshing sealer, the fuel tank must be replaced. Proceed to **Part III** of this service bulletin.

NOTE: Leaking wing tanks that have not been previously treated with sloshing sealer may be repaired with Products Research Corp PR-1422A2 sealant, as described in the maintenance manual.

PART III – REPLACEMENT OF FUEL TANKS THAT HAVE BEEN REPAIRED WITH SLOSHING TANK SEALER:

If the cured sloshing sealer is found to be separating from any part of the fuel tank's inner surface, or if a leak is discovered in a wing tank that has been previously treated with sloshing sealer, replacement of the wing tank is required.

1. Remove the affected wing tank, and install a new or serviceable replacement tank, in accordance with maintenance manual instructions.
2. Make a logbook entry indicating compliance with **Part III** of this Service Bulletin, including a statement of which wing tank(s) have been replaced.

MATERIAL REQUIRED: N/A

AVAILABILITY OF PARTS: N/A

EFFECTIVITY DATE: This Service Bulletin is effective upon receipt.

SUMMARY: Please contact your Factory Authorized Piper Service Facility to make arrangements for compliance with this Service Bulletin in accordance with the compliance time indicated.

NOTE: If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and notify the factory of address/ownership corrections. Changes should include aircraft model, serial number, current owner's name and address.

Corrections and/or changes should be directed to:

PIPER AIRCRAFT, INC.
Attn: Customer Service
2926 Piper Drive
Vero Beach, FL 32960